630.7
I06b
no.731
cop.8

NOTICE: **Return or renew all Library Materials! The *Minimum* Fee for each Lost Book is $50.00.**

The person charging this material is responsible for its return to the library from which it was withdrawn on or before the **Latest Date** stamped below.

Theft, mutilation, and underlining of books are reasons for disciplinary action and may result in dismissal from the University.
To renew call Telephone Center, 333-8400

UNIVERSITY OF ILLINOIS LIBRARY AT URBANA-CHAMPAIGN

MAY 06 1999

L161—O-1096

UNIVE
ILLINOI
AT URBAN
AGRIC

CIRCULATING COPY
AGRICULTURE LIBRARY

UNIVERSITY OF ILLINOIS
AGRICULTURE LIBRARY

~~LIBRARY~~
~~JUL 17 1968~~
~~NEW MEXICO STATE UNIVERSITY~~

Factors Affecting Post-High School EDUCATIONAL AND JOB PLANS of RURAL YOUTH

in Eight Illinois Counties in the 1963-64 School Year

D. E. Lindstrom

UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE
AGRICULTURAL EXPERIMENT STATION BULLETIN 731

CONTENTS

THE METHOD OF THE STUDY 6

FAMILY DIFFERENCES BETWEEN COLLEGE AND NON-COLLEGE PRONE 10

DIFFERENCES IN SCHOOL AND COMMUNITY ACTIVITIES 15

FUTURE EDUCATIONAL AND JOB PLANS 21

ACADEMIC COMPETENCE, MECHANICAL APTITUDE, AND PERSONALITY 31

INTERRELATIONSHIPS AMONG FACTORS INFLUENCING COLLEGE PRONENESS 33

INTERPRETATIONS AND IMPLICATIONS 39

BIBLIOGRAPHY 42

The author wishes to express his gratitude for valuable assistance in gathering and tabulating data to Hazel M. Chambers, research assistant, to Mrs. R. K. Dhindsa, D. R. Smucker, and Stanley Tucker, graduate assistants, and to Mrs. A. M. Bindman, graduate student.

The formulation and development of the study were under the guidance of a University-wide committee comprised of H. G. Halcrow, E. L. Sauer, H. J. Schweitzer, G. K. Brinegar, W. N. Thompson, G. G. Judge, and J. C. Headley, all of the Department of Agricultural Economics, University of Illinois; J. T. Hastings, W. M. Rogge, and L. J. Phipps, all of the College of Education, University of Illinois; and R. B. Cattell of the Department of Psychology, University of Illinois.

Urbana, Illinois June, 1968

Publications in the Bulletin series report the results of investigations made
or sponsored by the Experiment Station.

630.7
Il6b
no. 731
cop. 8

AGX

EDUCATIONAL AND JOB PLANS OF ILLINOIS RURAL YOUTH

By D. E. Lindstrom[1]

Movement of rural youth to urban areas has intensified as agricultural technology has advanced. Studies of this trend have given rise to the theory that such movement is inevitable as a society adopts a more modern or technological way of life. The movement is accelerated by greater opportunities in urban areas as well as by a growing lack of occupational opportunities in rural areas.

As technology advances, these "push" and "pull" forces create situations of disequilibrium out of which may arise serious social and economic problems, not only for the migrants, but also for the communities from which and to which they move. No single force is the cause for this movement, nor are the effects limited to any one subsystem in the social system. A Minnesota study notes that, "The purely economic view of migration as a simple response to variations in income is an inadequate explanation." (Taves and Coller, 1963, p. 33)[2]

Education has been one of the important forces in bringing about technical change both in agriculture and in industry. This includes education by the public school system as well as the various forms of higher education and research. However, there have been inequalities in the types of educational programs offered in the public schools, especially in rural areas.

The usual high school program in rural areas of the nation has been primarily oriented toward preparation for college. Vocational education as such has been largely centered around vocational agriculture and home economics. The emphasis on these two fields, strongly supported by federal aid, has made a significant contribution to the advancement of technology in agriculture and homemaking. But not all rural high schools offer even this much in the vocational field. For example, in the area of this study in the 1963-64 school year, 10 (32 percent) of the 31 schools in the sample did not offer vocational agriculture, making it impossible for 321 (21.3 percent) of the male students to enroll in such courses (Illinois Board of Vocational Education, 1963).

In the last 20 to 25 years an important structural change has been taking place in the Illinois rural school system. Many rural school districts have been consolidated, resulting in a sharp decrease in one-room schools and in the formation of community unit districts. But even with the change in form or structure, much remains to be done in changing curriculum content. For example, about the time data were being collected for this study, another study was directed at the need for a change in the traditional agricultural curriculum pointing to the necessity to broaden the programs to include agribusiness (Hemp, *et al.,* 1966). Such programs would help farm youth not planning to go to college or to farm and wanting specialized education to get it in courses dealing with agriculturally related industries.

---

[1] Professor of Rural Sociology.

[2] This and similar references are listed in the bibliography.

A more general study, not specifically directed at rural youth, has been done by the Bureau of Educational Research of the University of Illinois (McClure, 1960). The study examined the broad range of vocational education in the public schools, beginning with the programs in the high schools and extending to the more generalized programs beyond high schools. One of the findings of the study was that high schools should provide for the maximum development of all students, whether their occupational goals lead to further education in college, to further education at the junior college level, or to immediate entry into the work force.

A Task Force in Education, formed in April, 1965, issued its final report in December, 1966, recommending further changes both in the structure and the program of the school system. Among its recommendations were the further reorganization of school districts in the state to as few as 200 and the revision of the program to provide greater flexibility and comprehensiveness. Extension of the school system, including the formation of about 40 district or regional schools for youth who desired or needed extended vocational or occupational training, was also recommended.

The problem created by the narrowness of the school system, especially with respect to further education for high school graduates not planning on college and dropouts from high school, is being corrected in Illinois by the formation of a state system of junior colleges. The enabling legislation provides that the programs should be flexible and comprehensive and that these institutions must be open to all who are qualified and wish to enter. In the past the primary emphasis of junior colleges and community colleges has been placed on senior-college preparatory programs. Some of these institutions are also offering some vocational education. The junior college system now being developed, however, will be able to offer a broader program of vocational training. The Illinois Public Junior College Act states, in part, that, "Class I

Table 1. — Occupational Distribution of the Labor Force in the United States in 1963

Type of worker	Percent	
Managerial and professional workers		23.5
Professional and technical workers	12.6	
Managers, officials, and nonfarm proprietors	10.9	
White-collar and service workers		35.0
Clerical workers	15.2	
Sales workers	6.3	
Household and other service workers	13.5	
Blue-collar workers		34.4
Farmers and farm managers	3.6	
Skilled workmen and foremen	12.6	
Semiskilled workers	18.2	
Unskilled workers		7.1
Nonfarm laborers	4.7	
Farm laborers	2.4	

Source: Heilbroner, 1965, p. 188.

junior college districts shall admit all students qualified to complete any one of their programs including general education, transfer, occupational, technical, and terminal, as long as space for effective instruction is available. After entry, the college shall counsel and distribute the students among its programs according to their interests and abilities."[1]

An important point is that most (69.4 percent) of the jobs in the United States are still classed in the service, clerical, skilled, and semiskilled areas (Table 1). These are the areas in which many rural youth, especially those seeking jobs immediately after graduation from high school, try to find jobs. It is therefore imperative that those rural youth not planning to attend a full four-year college or university be adequately prepared to qualify for these jobs. Such vocational training can be provided by high schools or by junior colleges and trade schools.

In view of this situation, this study suggests possible directions of program development in such schools by analyzing educational and personal differences between those rural youth who do not plan to go to college and those who do. These differences are important because they are the basis for the decision-making process whereby the youth decide whether to go to a full four-year college or university, to attend a junior college or trade school, or to seek a job immediately after graduation from high school. Educational factors discussed include academic and mechanical aptitude, attitude toward teachers and counselors, and opinions about the adequacy of the high school attended in regard to preparation for college or a job. Personal factors discussed include differences in family size, education of parents, parents' attitude toward post-high school education, the family's general status in the community, and the nature of the youth's present reference groups, including friends and admired adults.

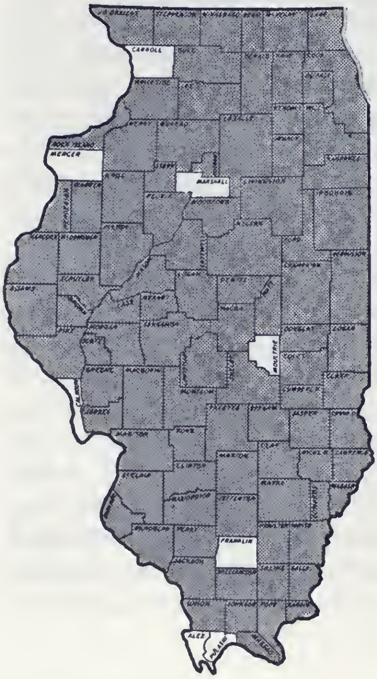
---

[1] Ill. Rev. Stat., c. 122, § 103.17 (1965).

THE METHOD OF THE STUDY

The study was designed to determine the aptitudes, skills, and sociological and personal factors that characterize those youths not planning to go to college and who wish to enter technical or service occupations. From these determinations, the study suggests that certain types of vocational training not now generally available to rural high school or post-high school youth should be offered.

To determine what are these aptitudes, skills, and factors, a series of tests, supplemented by a personal questionnaire, was given to juniors and seniors in 31 high schools located in eight selected counties in Illinois (Figure 1). Academic tests were used to test skills in the academic and vocational fields. These tests were used to indicate fitness or suitability for various types of jobs. A personality test was used to determine not only what were the sociopersonal factors affecting employability in technical, artisan, and other jobs, but also to show adapt-



The eight counties in Illinois in which schools that participated in the study were located are shown in white. (Fig. 1) ability to social situations in which the youth may find themselves, since ability to work and deal with people is an increasingly important attribute, especially in the service occupations.

The types of training needed to fit youth not planning to go to college were at least partially determined by asking what kinds of courses were taken or were available in high school and what other courses the youth felt should have been available. These data were supplemented by data on the occupational aspirations held by the youth on what they would like to do and what kinds of jobs they hoped to enter.

Source of data. This bulletin represents the third part of the complete study. A pilot study to test the methods of the research involved was done at Sullivan in 1963 (Lindstrom, 1964b). Also, an analysis was made of the University of Illinois High School Testing Program Office test and environmental data about the juniors and seniors in high schools in the counties selected for this study (Lindstrom, 1964a, and Lindstrom, 1965b.)

For this study, data were obtained from all juniors and seniors in 31 high schools in eight counties in Illinois. These counties were in areas with a high unemployment level and therefore eligible for federal aid for redevelopment. Rural area development committees were functioning in all eight counties at the time of data collection in the fall of 1963. The counties were widely distributed so they would be representative of the rural area development counties of the state. Three counties — Alexander, Franklin, and Pulaski in a general farming and fruit area — represent high-relief-rate counties with a lack of farming and industrial opportunities. Average farm size of these three counties is well below the state average. Calhoun County is in a general farming area and Moultrie County is in a cash grain area. Marshall and Mercer counties are in a livestock and grain area, and Carroll County is in a mixed livestock area. Alexander, Franklin, and Pulaski counties accounted for about 45 percent of the sample.

All schools in seven of the eight counties cooperated so that, with the help of administrators, teachers, and counselors, the cooperation of the students was exceptionally good. In Marshall County only one rural school, with 17 juniors and seniors, cooperated. A total of 3,060 sets of data was secured of which 2,929 could be used.

Nature of data secured. Tests administered to the youth yielded (1) academic scores on abstract reasoning, verbal reasoning, total of abstract and verbal reasoning (intelligence), natural-science reading, social-science reading, writing, correctional errors in writing, and func-

Table 2. — Idealistic and Realistic College Plans of the Youth

Response of student on post-high school education		Percent
Idealistic:	want to go to college	61
Realistic:	expect to receive university or college training	41
Realistic:	expect to receive college degree	42
Realistic:	expect to enter professional, technical, or managerial occupation	41

[a] This and remaining tables in this bulletin report data relating to 2,929 juniors and seniors in 31 rural high schools in Illinois and to their families.

tional errors in writing; (2) mechanical aptitude scores[1]; (3) scores on 16 personality traits[2]; (4) occupational aspiration scores (Haller and Miller, 1963); and (5) socioeconomic rating scores (Sewell, 1943). A questionnaire on family and community factors affecting occupational choice that asked the students for data on (1) the personal and family situation; (2) the church and school situation; (3) the student's future plans; (4) the nature of further training thought needed; and (5) home conveniences. Further data were available from the University of Illinois High School Testing Service.

Definition of the college prone and the non-college prone. In order to analyze the data for college-prone youth and non-college-prone youth separately, it was necessary to determine who were the college prone and who were the non-college prone. On the question, "I do or do not want to go to college," 61 percent of the youth indicated that they wanted to go. Yet, when asked what kind of training they expected, only 41 percent indicated university or college. Business or trade school training was expected by 27 percent of the youth and the remaining 32 percent indicated the armed forces, said they did not know, or gave no answer to the question. Also, only 42 percent indicated that they expected to receive college degrees and only 41 percent indicated that they expected to enter professional, technical, or managerial jobs which normally require college training (Table 2).

Other studies have reported similar data. A USDA study made in 1962 in 32 states showed that 37 percent of all white farm youth expected to go to college (Moore, *et al.,* 1964). In a 1957 Wisconsin study, 37 percent of 10,322 high school seniors interviewed said they expected to attend college (Sewell and Haller, 1965). In a 1959 Kentucky study of 451 farm youth, 35 percent of the boys and 29 percent of the girls expected to go to college (Schwartzweller, 1960). A Minnesota study made in 1961 showed that 41 percent of the 44,756 youth in the sample expected to go to college (Taves and Coller, 1963).

---

[1] *Mechanical Reasoning, Form A.* The Psychological Corporation, New York. 1947.

[2] *IPAT-16PF Form A.* Institute of Personality and Ability Testing, Champaign. 1962.

In view of these studies it seems reasonable to regard 41 percent of the rural high school youth in this study as realistically planning to go to college. These 41 percent were designated as the college prone for the purposes of this study and the remaining 59 percent as the noncollege prone. In the remainder of this bulletin they will be referred to as the "CP" and the "NCP" respectively.

The fact that 61 percent of the youth indicated that they wanted to go to college but only 41 percent expected to do so may be explained by regarding the question, "I do or do not want to go to college," as an idealistic one. Thus, 61 percent of the youth idealistically *wanted* to go to college. The question, "What kind of training is expected," can be regarded as the realistic one. Thus, only 41 percent of the youth *expected* to go to college. The 20-percentage-point difference between desire and expectation may also have partly come about because of a misinterpretation of the questionnaire.

Method of analysis of data. The data were programmed on computer punch cards. This resulted in computation of simple frequencies; Chi-square tests of significant differences; Pearsonian coefficients of correlation between all variables, especially those on academic, mechanical aptitude, personality, and occupational aspiration scores; occupational, educational, and social participation ratings; and socioeconomic and social status scores.

The simple frequencies were based on six categories: CP, NCP, farm, nonfarm, male, and female. Zero-order correlations were computed to determine statistically significant relations for the total sample on academic competence, mechanical aptitude, the 16 personality factors, occupational aspirations, socioeconomic status, and a number of other indexes. Chi-square tests of significance were computed to determine differences between the CP and the NCP. Any Chi-square value with a p of 0.05 or smaller indicates that the difference between the CP and the NCP is statistically significant (Hagood and Price, 1952. p. 372ff). For the 2,929 usable sets of data in the sample the critical ratio was 0.047 in a two-tailed test. Any coefficient above 0.047 was considered to be significant at the 0.01 level of probability.

In order to provide a frame of reference for studying what types of training those not expecting to go to college needed, the differences between them and those planning to go to college were determined using a number of indexes. The discussion of these differences comprises the main part of this bulletin. Differentials were also determined with respect to the tests used for determining academic and vocational competence and measures of personality and of aspirations. It was assumed that if the NCP fell below the CP in any of these respects, these differences would indicate training needed for fitness for occupations. The results can be used for guidelines in counseling rural youth who do not plan to go to college in determining the nature of the future training they should seek.

FAMILY DIFFERENCES BETWEEN COLLEGE AND NON-COLLEGE PRONE

Residence, farm size, and ownership. Residence of the youth was about equally divided between rural farm, rural nonfarm, and town. Thirty-one percent of the youth in the study lived on farms, 39 percent lived in the open country or in small villages, and 30 percent lived in towns predominantly dependent on farming (Table 3).

The farms on which the youth lived were mostly of the family farm type where most of the farm work was done by members of the family. Eighty-seven percent of these farms were under 340 acres, 33 percent under 100 acres, and 13 percent over 340 acres. The CP youth, in significantly higher percentages, lived on farms over 180 acres in size than did the NCP (Table 4).

The families of the youth. Eighty-three percent of the youth lived at home with their parents and 5 percent of the families with both par-

Table 3. — Residence, Farm Size, and Tenure of the Families of the Youth

	Number	Percent			Chi-square
		Total	CP	NCP	
Residence	2,929	100	(N=1,204)	(N=1,725)	
Living on farms	919	31	31	32	17.11[a]
Country, nonfarm	285	10	8	11	
Village	846	29	27	30	
Town	879	30	34	27	
Farm size	877	100	(N=360)	(N=517)	
Under 100 acres	293	33	27	38	21.77[a]
101 to 180 acres	226	26	25	26	
181 to 340 acres	242	28	30	26	
341 acres and over	116	13	18	10	
Farm tenure of father or guardian	721	100	(N=313)	(N=408)	
Full owner	428	59	62	57	3.10[b]
Part owner	78	11	11	11	
Full tenant	162	23	22	23	
Other	53	7	5	9	

[a] Df = 3; $p < .001$. [b] Not significant.

ents in the home also had one adult dependent. Only 8 percent lived with only one parent and 4 percent lived with relatives such as grandparents, uncles, or aunts. Eighty-seven percent of the CP and 80 percent of the NCP lived at home with their parents (Table 5).

Table 4.—Average Size of Farm, Average Value of Farmland per Acre, and Proportion of Tenancy on Farmland in the Eight Counties in the Study

County	Average acres per farm	Average value per acre	Percent of tenancy	Average age of operator
Alexander	241.2	$155.96	23.4	52.4
Pulaski	204.8	153.46	10.5	54.0
Franklin	154.3	162.55	5.8	52.5
Calhoun	181.8	133.86	13.5	52.5
Moultrie	246.1	537.47	35.0	49.4
Marshall	246.5	409.79	49.8	49.2
Mercer	243.4	296.44	31.5	49.8
Carroll	220.6	260.18	39.1	47.9
State	225.5	363.98	30.4	50.0

Source: U.S. Department of Commerce, 1967.

Table 5. — Characteristics of the Families of the Youth

	Percent			Chi-square
	Total	CP	NCP	
With whom homes are made				
Own parents	83	87	80	27.69[a]
Own parents and one adult dependent	5	4	5	
One parent only	8	6	10	
Others	4	3	5	
Number in family at home				
Two or fewer	5	4	6	18.59[a]
Three or four	50	52	45	
Five or six	29	30	29	
Seven or more	11	10	14	
No answer	5	4	6	
Number in family away from home				
None	44	53	40	54.72[a]
One	20	22	20	
Two or three	16	12	19	
Four or more	9	4	9	
No answer	11	9	12	
Number of brothers in the family				
None	30	32	26	13.56[b]
One or two	50	52	50	
Three or more	14	11	16	
No answer	6	5	8	
Number of sisters in the family				
None	32	35	29	24.98[c]
One or two	48	50	47	
Three or more	14	10	16	
No answer	6	5	8	

[a] Df = 3; p < .001. [b] Df = 2; p < .01. [c] Df = 2; p < .001.

The average family consisted of two parents and two children. About 40 percent of the families had three or more children. Families with CP youth were significantly smaller than those with NCP youth. The majority of the families (64 percent) had no one or only one youth living away from home, 44 percent had none living away from home, and only 9 percent had four or more away from home.

Youth in NCP families had left home in significantly larger numbers than CP youth. Significantly fewer of the CP had brothers and sisters living at home.

Age and sex of youth. The majority (53 percent) of the youth were 17 years of age when the data were collected. Twenty-six percent were 16 years old (mostly juniors) and 18 percent were 18 years old (mostly seniors). Fifty-three percent were males and 47 percent were females. The CP, in significantly higher percentages, were younger than the NCP and there were significantly more males than females among the CP (Table 6).

Fifty-eight percent of the youth in the sample were juniors and 42 percent were seniors. This is because some youth drop out, even in

Table 6. — Age, Sex, Residence, and Class in School of the Youth, and Country of Birth of Parents of the Youth

	Number	Percent			Chi-square
		Total	CP	NCP	
Age in years					
16 and under	782	26	27	26	39.40[b]
17	1,534	53	56	50	
18	534	18	16	20	
19 and over	63	2	(a)	3	
No answer	16	1	1	1	
Sex					
Male	1,545	53	60	48	37.96[c]
Female	1,384	47	40	52	
Farm—nonfarm					
Farm	919	31	31	32	.05[d]
Nonfarm	2,010	69	69	68	
Class in school					
Junior	1,689	58	56	59	2.55[d]
Senior	1,240	42	44	41	
Country of birth of parents					
Father					
Within United States	2,739	94	93	94	.05[d]
Outside United States	40	1	1	1	
No answer	150	5	6	5	
Mother					
Within United States	2,745	94	93	95	.48[d]
Outside United States	39	1	1	1	
No answer	145	5	6	4	

[a] Less than 0.5 percent. [b] Df = 3; $p < .001$. [c] Df = 1; $p < .001$.
[d] Not significant.

their junior year. Thus the proportion who were seniors is significantly higher for the CP than for the NCP.

There was no significant difference in college proneness between youth whose parents were engaged in farming and youth whose parents were otherwise employed.

Occupations held by fathers of the youth and parental satisfaction with these occupations. The highest percentage (41) of the fathers' occupations was in the blue-collar area (foreman, craftsman, and farming-allied). By adding the next lower class (operative, laborer), 66 percent would be included. In the nation as a whole only 34 percent of the labor force was in the blue-collar area in 1963 (Table 1). It is thus obvious that there is a higher percentage of blue-collar workers in rural areas than in urban areas. Differences are also apparent between the occupations of the fathers of the CP and the fathers of the NCP. Significantly higher percentages of the latter were in the foreman, craftsman, farming-allied, operative, and labor classes (Table 7).

Fathers of the CP youth tended to keep their jobs longer than those of the NCP, and those of the CP had had fewer different jobs in their lifetimes. This indicates greater occupational stability on the part of fathers of the CP youth.

The parents of about 80 percent of the youth were quite well satisfied with the occupations held by the breadwinner. More of the mothers than the fathers were not well satisfied. A higher percentage of the parents of the CP was completely satisfied with the father's occupation than was the case of the parents of the NCP.

The social and economic status of the family. Significant differences between the families of the CP and those of the NCP were found with respect to home ownership, socioeconomic status, social status, ability to support the family, and ability to send the youth to college.

Only 21 percent of the parents of the youth included in this study reported they lived in rented homes. The CP, in higher proportions than the NCP, lived in owned homes (Table 8).

The socioeconomic status index (Sewell, 1943) is a better measure of economic status of the family than home ownership. This measure also shows that there were significant differences between the CP and the NCP in such scores. Over half of the CP rated 89 or more points (out of a possible total of 98 points), while 61 percent of the NCP rated below 88. A high socioeconomic index also indicates that the family scored high on home quality, home conveniences, home facilities, communication facilities, education, and church attendance.

Table 7. — Occupational Class, Years Worked in Present Job, and Satisfaction With Father's Occupation of the Families of the Youth

Occupational situation	Percent Total	Percent CP	Percent NCP	Chi-square
Occupation of father				
Professional, technical, managerial......	16	24	10	138.27^b
Clerical, sales, service................	10	11	8	
Foreman, craftsman, farming-allied.......	41	39	42	
Operative, laborer, armed services.......	25	19	29	
All others..............................	8	7	11	
Years worked in present job				
Five or fewer...........................	14	12	15	15.09^c
6-10....................................	12	13	12	
11-15...................................	13	13	13	
16-20...................................	20	22	19	
21-30...................................	17	19	15	
More than 30............................	8	8	7	
No answer...............................	16	13	19	
Number of past occupations				
None....................................	21	23	19	47.05^d
One.....................................	36	35	37	
Two or more.............................	27	29	26	
Don't know or no answer.................	16	13	18	
How parents look upon father's job[a]				
4 or fewer points.......................	18	15	20	21.27^d
5 or 6 points...........................	32	31	32	
7 or 8 points...........................	39	44	37	
No answer...............................	11	10	11	

Father's and mother's satisfaction with father's job	Father				Mother			
	Percent Total	Percent CP	Percent NCP	Chi-square	Percent Total	Percent CP	Percent NCP	Chi-square
Not well satisfied.....	7	6	8	14.63^d	18	15	20	18.27^d
Fairly well satisfied..	44	42	46		32	31	32	
Completely satisfied...	40	43	37		39	44	37	
No answer.............	9	9	9		11	10	11	

[a] Composite index. [b] Df = 4; $p < .001$. [c] Df = 5; $p < .01$. [d] Df = 2; $p < .001$.

Differences in the index for social status also showed that more of the CP lived in higher-status families than was the case with NCP. This index is based on the North-Hatt rating for social status based on parental educational attainment, home quality, home facilities, communication facilities, and mean occupation status of the father (Haller and Miller, 1963).

Even though only 5 percent of the youth reported the family too poor to provide for family needs, significantly higher percentages of the NCP youth reported that this was the case. It was also found that 20 percent of the CP youth and 29 percent of the NCP youth thought that their families were too poor to send them to college. There were wide differences between the counties in ability of the wage earner to

Table 8. — Social and Economic Situation of the Families of the Youth

	Percent[a]			Chi-square
	Total	CP	NCP	
Tenure of home or farm				
Rented	21	19	23	7.43[d]
Owned	78	80	76	
Socioeconomic status rating[b]				
39 to 78 points	11	6	16	228.36[e]
79 to 88 points	41	32	45	
89 to 98 points	37	53	26	
Social status rating[c]				
67 to 127 points	33	24	39	169.77[e]
128 to 157 points	46	52	41	
158 to 188 points	6	12	2	
Ability to provide for family needs				
Too poor	5	3	7	15.68[f]
Not too poor	91	92	90	
Ability to provide college for youth				
Too poor	25	20	29	31.46[f]
Not too poor	70	74	67	

[a] Nonrespondents not included. [b] See Sewell, 1943.
[c] North-Hatt rating for social status. See Haller and Miller, 1963.
[d] Df = 1; $p < .01$. [e] Df = 2; $p < .001$. [f] Df = 1; $p < .001$.

support the family. In April, 1964, 4.2 percent of the state's total population was on public assistance. But in Alexander County it was 21.3 percent, in Pulaski County, 23.7 percent, and in Franklin County 10.5 percent. This compared with 5.7 percent in Calhoun County, 3.0 percent in Moultrie County, 1.9 percent in Marshall County, 2.0 percent in Mercer County, and 0.8 percent in Carroll County.

DIFFERENCES IN SCHOOL AND COMMUNITY ACTIVITIES

The extent to which the youth or their parents take active part and acquire leadership and prestige in school activities is related to college proneness. Also, the number and types of friends youth make among adults and the prestige of those adults are factors related to the choice of the youth in considering post-high school education or jobs.

Location of schools attended. The majority (61 percent) of the students in this study came from open country and village elementary schools, and a higher percent of these were NCP. Also, 56 percent of the NCP and 50 percent of the CP youth attended high schools in villages or open country areas (Table 9).

Education of parents. The education of parents also has an important influence on the educational or occupational choices of the youth. A majority (56 percent) of the fathers but only 46 percent of

Table 9. — Location of Schools Attended by the Youth

	Percent[a]			Chi-square
	Total	CP	NCP	
Elementary school				
Open country	10	10	10	9.88[b]
Village	51	48	53	
Town or small city	38	41	36	
High school				
Village or open country	53	50	56	13.09[c]
Town or small city	46	50	43	

[a] Nonrespondents not included.

[b] Df = 2; $p < .01$. [c] Df = 1; $p < .001$.

the mothers did not finish high school. Although 28 percent of the fathers and 39 percent of the mothers finished high school, only 13 percent of the fathers and 14 percent of the mothers had gone to college (Table 10).

Fifty-six percent of the fathers and 68 percent of the mothers of the CP youth had finished high school and had at least entered college. This compares with only 32 percent of the fathers and 41 percent of the mothers of NCP youth.

Parental satisfaction with own education. Significantly higher proportions of the parents of the CP were completely satisfied with their own educational attainments. Higher percentages of the parents of the NCP were not very well satisfied. When scaled on the basis of an index, the difference in percentages was also significant (Table 10).

Church participation. Sixty-nine percent of the youth in the sample said they were church members and 64 percent said that they regularly attended church.

All major denominations were represented by those youth claiming church membership. Ten percent of the youth did not indicate to which denomination they belonged. The CP were members of churches in significantly higher proportions than were the NCP (Table 11).

Youth reported they attended church in higher percentages than was reported by them for their fathers, but the percentages were the same for their mothers. CP youth attended church in significantly higher percentages than did the NCP youth. Likewise, fathers and mothers of CP youth were reported to attend church in significantly higher percentages than did parents of NCP youth.

Participation of rural youth in school and community activities. The extent of youth involvement has a direct bearing on status in his

Table 10. — Grade Attainment in School and Satisfaction With Educational Attainment by Parents of the Youth

	Fathers				Mothers			
	Percent[a]			Chi-square	Percent[a]			Chi-square
	Total	CP	NCP		Total	CP	NCP	
Attainment								
8th grade or less.....	39	27	46	232.15[b]	26	16	33	271.17[b]
Grades 9 to 11........	17	15	18		20	15	24	
12th grade............	28	33	24		39	45	34	
Some college and college degree......	13	23	8		14	23	7	
Satisfaction								
Not very well satisfied..........	21	18	23	24.02[c]	15	13	16	20.79[c]
Well enough satisfied.	51	49	52		54	52	57	
Completely satisfied..	23	27	20		28	30	27	

	Percent (fathers and mothers)[a]			Chi-square
	Total	CP	NCP	
Attainment				
4 to 10 points............	33	19	43	272.13[c]
11 to 13 points...........	28	27	29	
14 to 16 points...........	36	52	24	
Satisfaction				
2 or fewer points.........	12	9	13	34.56[c]
3 to 6 points.............	55	52	58	
7 or 8 points.............	27	32	23	

[a] Nonrespondents not included.

[b] Df = 3; $p < .001$. [c] Df = 2; $p < .001$.

Table 11. — Church Participation and Church Preference of the Youth and Their Parents

	Percent[a]			Chi-square
	Total	CP	NCP	
Youth				
Membership..................................	69	73	65	33.28[b]
Nonmembership...............................	25	20	29	
Attendance..................................	64	76	56	113.51[b]
Nonattendance...............................	33	22	41	
Parents				
Father's attendance.........................	45	54	39	64.20[b]
Father's nonattendance......................	48	40	54	
Mother's attendance.........................	64	72	57	62.97[b]
Mother's nonattendance......................	24	26	40	
Church preference of youth who were members				
Baptist.....................................	22	20	23	31.68[c]
Methodist...................................	17	20	14	
Catholic....................................	11	12	11	
Presbyterian................................	8	9	7	
Lutheran....................................	7	5	7	
Protestant (denomination not specified)......	4	4	5	
Others......................................	21	22	20	
Not reported................................	10	8	11	

[a] Nonrespondents not included.

[b] Df = 1; $p < .001$. [c] Df = 7; $p < .001$.

social group. Various indexes were used to indicate the extent of this involvement. These included participation in school club activities, in church and community clubs, in extracurricular school activities, and in leadership activities. The opportunity was given to each youth to rate himself in leadership activities and prestige in his school community. In every case the differences between the CP and the NCP were significant (Table 12).

It was found that the majority were low participators with 74 percent of the NCP and 52 percent of the CP participating in five or fewer school club activities.

Almost twice as many of the NCP as CP participated in five or fewer church and community clubs and organizations, while twice as many of the CP participated in four or more school extracurricular activities. Over three times more CP than NCP rated themselves as above average in leadership and, although the majority of the youth rated themselves low in prestige, 38 percent of the CP compared with only 20 percent of the NCP rated themselves above 5 points in prestige.

Family and peer group influences. Youth have the highest number of social contacts in their family and peer groups. To get an indication of the influences of these groups, the youth were asked to give the number of friends and the number of admired adults they claimed, their

Table 12. — Participation in School and Church Activities and Leadership and Prestige Ratings of the Youth

	Percent[a]			Chi-square
	Total	CP	NCP	
School club activities				
Five or fewer	65	52	74	335.04[b]
Six to ten	17	23	13	
Eleven or more	14	22	8	
Church and community clubs				
Five or fewer	42	29	50	196.22[b]
Six to ten	19	21	19	
Eleven or more	36	48	26	
School extracurricular activities				
None or one	36	26	42	134.15[b]
Two or three	38	43	34	
Four or more	18	26	13	
Leadership self-rating				
Below average	21	11	28	232.78[b]
About average	65	66	64	
Above average	10	18	5	
Prestige self-rating				
5 or fewer points	64	57	69	104.48[b]
6 to 9 points	21	27	16	
10 or more points	7	11	4	

[a] Nonrespondents not included. [b] Df = 2; $p < .001$.

relationship to the admired adults, and the occupational status held by them.

Ten or fewer friends were claimed by 69 percent of the youth and 39 percent reported they had fewer than six. Also, about the same percentages of the CP and the NCP claimed about the same number of friends (Table 13). It appears, therefore, that the number of friends cannot be regarded as a factor in college proneness. It is, rather, the type of friends that is of most importance.

There were significant differences in the number and occupational prestige rating of admired adults and the youth's kin-relationship to these adults. The CP were found to have more admired adults than the NCP. Even though the majority of all youth (55 percent) were not kin-related to admired adults, more of the CP (61 percent) were not so related. Kin-relationships were probably more of an influence on decisions made by NCP than by the CP in view of the Chi-square values shown in Tables 7 and 13.

Occupational prestige ratings of admired adults were probably of even more importance than kin-relationships. Tables 7 and 13 show that significantly higher percentages of the fathers of the NCP than the fathers of the CP were low in occupational rank. Likewise, significantly higher percentages of the kin-relatives of the NCP were low in occupational rank.

Table 13. — Relationships of the Youth With Friends and Admired Adults

	Percent[a]			Chi-square
	Total	CP	NCP	
Friends claimed by youth				
Five or fewer	39	37	39	1.24[c]
Six to ten	30	31	30	
Eleven or more	23	23	24	
Admired adults claimed by youth				
Two or fewer	29	26	32	18.22[d]
Three or four	35	36	34	
Five or more	27	30	25	
Kin relationship of admired youth to youth				
Mostly kin	26	20	30	45.24[d]
Equally kin and non-kin	10	10	10	
Mostly non-kin	55	61	50	
Occupational prestige rating of admired adults[b]				
35 or fewer points	6	3	9	207.10[e]
36 to 52 points	26	16	34	
53 to 70 points	48	58	40	
71 or more points	10	14	7	

[a] Nonrespondents not included. [b] North-Hatt (NORC) rating scale.
[c] Df = 2; not significant. [d] Df = 2; $p < .001$. [e] Df = 3; $p < .001$.

Youth's appraisal of teachers' influence. Teachers' influence appears to be a differential factor, favoring the CP youth. Differences between them and the NCP are significant on all five aspects of influence tested — making students feel wanted, earnings students' respect, indicating to the students a thorough grasp of the field taught, making students want to learn, and understanding the students' strong and weak points (Table 14).

Most of the 31 schools included in the study offered programs designed primarily to prepare the students for college. This may have been a factor in influencing the students' responses, for those who were not thinking of going to college may have felt that the primary concern of the teachers was for those preparing for college.

Table 14. — Effectiveness of Teachers in School as Seen by the Youth

	Percent[a]			Chi-square
	Total	CP	NCP	
Helpfulness of teachers				
Made students feel wanted				
All	15	18	13	52.16[b]
Most	41	46	38	
Some	36	30	39	
None	7	4	7	
Earned students' sincere respect				
All	13	13	13	33.61[b]
Most	42	46	39	
Some	40	39	41	
None	3	1	4	
Showed thorough grasp of field				
All	16	14	17	44.49[b]
Most	42	49	38	
Some	35	33	36	
None	4	2	6	
Made students want to learn				
All	13	13	14	38.03[b]
Most	37	43	34	
Some	43	41	44	
None	4	2	5	
Understood students' strong and weak points				
All	12	11	12	36.52[b]
Most	34	38	32	
Some	44	45	43	
None	7	4	9	

	Correlations[c]			
Nature of helpfulness of teachers	A	B	C	D
Earned students' sincere respect	.54	...		
Made students want to learn	.47	.53	...	
Understood students' strong and weak points	.46	.47	.49	...
Showed thorough grasp of field	.39	.46	.43	.46

[a] Nonrespondents not included.

[b] Df = 3; $p < .001$.

[c] A = Made students feel wanted; B = Earned students' sincere respect; C = Made students want to learn; D = Understood students' strong and weak points.

FUTURE EDUCATIONAL AND JOB PLANS

Post-high school educational plans. Some type of education beyond high school was desired by 76 percent of all of the youth questioned. Only 21 percent said they did not desire further education. Forty-one percent indicated university or college as the place to obtain such education and 27 percent indicated preference for business or trade schools. Forty-two percent of the NCP youth preferred business or trade institutions and 2 percent of all youth questioned hoped to get in-service training. Most of these thought they would find such training in the armed services (Table 15).

Table 15. — Educational and Training Aspirations of the Youth

	Percent[a]			Chi-square
	Total	CP	NCP	
Post-high school education desired	76	95	63	385.37[c]
Post-high school education not desired	21	4	33	
Where can post-high school education be secured				
University or college	43	86	13	1,151.56[c]
Business or trade school	27	5	42	
On job, armed forces, and others	2	(b)	4	
Not known	5	4	6	
How far away can youth go to get post-high school education				
Under 10 miles from home	30	43	22	33.76[c]
Under 100 miles from home	13	21	8	
Over 100 miles from home	19	21	17	
Certainty of plans				
Completely certain	64	72	57	41.28[c]
Not very certain	20	16	23	
Additional courses desired				
Physical, biological, and social science courses	13	18	3	404.53[d]
Humanities and professional courses	18	37	9	
Engineering and farming courses	6	10	9	
Business and other courses	17	5	18	
Not known and none	20	21	19	
Degrees or other recognition desired				
Bachelor's, master's, or doctor's degree	42	81	15	487.94[c]
Specialized, other, and none	36	10	56	

	Fathers' desires				Mothers' desires			
	Percent[a]			Chi-square	Percent[a]			Chi-square
	Total	CP	NCP		Total	CP	NCP	
No encouragement to continue education	24	11	33	355.73[c]	14	4	22	359.13[c]
Some encouragement to continue education	21	14	26		22	13	28	
Strong encouragement to continue education	47	67	34		60	78	46	

[a] Nonrespondents not included. [b] Less than 0.5 percent.
[c] Df = 2; p < .02. .[d] Df = 1; p < .001.

Of especial interest is the encouragement given by parents to the youth in continuing their schooling. The differences between the CP and the NCP were significant. Sixty-seven percent of the fathers and 78 percent of the mothers of the CP youth encouraged their youth to continue in school. Only 34 percent of the fathers and 46 percent of the mothers of the NCP youth did so. Higher percentages of the parents of the NCP suggested to the youth that they leave school.

Sixty-four percent of the CP and 30 percent of NCP said they could get the education they desired within 100 miles of home. More than half of the NCP youth did not answer this question, perhaps implying that they did not know where to get the desired training.

Certainty of plans. Two-thirds of all youth said they were certain about plans for going or not going to college, but higher proportions of the CP youth expressed this certainty. Over 20 percent of the NCP youth said they were not very certain.

Course work desired. Fifty-four percent of all youth reported they would liked to have had more or different course work than they had the chance to take while in high school. The CP, in higher percentages than the NCP, desired more work in the natural and social sciences and in the humanities and professional areas. More of the NCP desired more training in business and vocational areas. Only 15 percent of the CP youth, compared with 27 percent of the NCP, indicated that they desired additional courses in the engineering, agricultural, and business areas. As in the case of certainty of plans, about 20 percent of both CP and NCP said they did not know what additional education, if any, they needed.

Post-high school occupational plans. Forty-one percent of the youth planned to go into the professional, technical, and managerial fields. When asked what their specific aspirations for jobs were, 71 percent of the CP youth reported they hoped to go into professional, technical, and managerial occupations; 15 percent gave no answer; and 14 percent mentioned jobs not requiring college training. On the other hand, 61 percent of the NCP youth reported they expected to get jobs below the professional, technical, and managerial area. Twenty percent did not know or did not answer and 19 percent hoped to get the higher-class jobs even though not expecting to go to college (Table 16).

Sixty-five percent of the CP and 63 percent of the NCP were not certain about their choice. Yet 73 percent of the CP and 65 percent of the NCP said that they had given a great deal of thought to the matter. Farming was a choice of only 5 percent of both the CP and the NCP. This may be so because it is difficult today to get a start in farming.

Table 16. — Types of Jobs Considered by the Youth

	Percent			Chi-square
	Total	CP	NCP	
Occupation youth hoped to enter				
Professional, technical, managerial	41	71	19	866.54[b]
Clerical, sales, service	15	4	22	
Craftsman, foreman, farming-allied, homemaking	23	9	34	
Operative and skilled labor, armed forces	3	1	5	
Not known and no response	18	15	20	
Certainty of choice[a]				
Certain	33	30	34	3.62[c]
Not certain	63	65	63	
Thought given to choice[a]				
A great deal	69	73	65	38.80[d]
Some or little	28	22	33	
Nature of occupation desired				
Farm	5	5	5	.22[e]
Nonfarm	80	81	79	
No response	15	14	16	
Number of different occupations thought of[a]				
One or none	21	18	23	15.51[d]
Two	28	28	29	
Three or four	42	47	39	
Knowledge about job desired[a]				
Some, little, or none	73	73	72	52.60[f]
A great deal	23	21	25	
Source of information on job choice[a]				
Friends and holders of similar jobs	32	25	36	66.19[g]
Family	23	23	24	
Teachers and counselors	19	24	15	
Others	24	27	22	

[a] Nonrespondents not included.

[b] Df = 4; $p < .001$. [c] Df = 2; not significant. [d] Df = 1; $p < .001$.

[e] Df = 1; not significant; [f] Df = 2; $p < .001$. [g] Df = 3; $p < .001$.

The lack of choice of a single job is shown in that 70 percent of all the youth had thought of two or more jobs and 75 percent of the CP and 68 percent of the NCP had done so.

Knowledge about job desired and sources of information. Most youth had little knowledge of jobs desired. Only 23 percent of all of the youth reporting said that they had a great deal of knowledge about the job they hoped to get (Table 16). In this respect, there was a significant difference between the CP and NCP, favoring the NCP, probably because they had a greater interest in getting a job soon.

In seeking information on jobs, only 15 percent of the youth went to their teachers and less than 4 percent to the counselor in the system. Even so, differences between CP and NCP youth were significant. Since these responses came from the youth and not from school or other records, it may be that the youth were not aware that counseling was available. Or it may mean that the counselors were not effective.

Both school and nonschool influences operated differentially on the job choices of the youth. Sixty percent of the NCP and 48 percent of the CP youth said they were influenced by friends, holders of similar jobs, and family members. Higher percentages of the CP said they went to teachers and counselors for advice. An important implication is that NCP youth tended to turn to nonprofessional sources and this probably influenced their job choice toward the lower-ranking jobs. This is also related to the data showing that the fathers and the admired adults of the NCP, in larger percentages than those of the CP, were in the lower-ranking occupations.

Sources of expected help in making job choices and getting started. Parents and other relatives are most important influences in youth's job choices and in getting started in a job (Table 17). The major sources of information about jobs for both the CP and the NCP youth were parents and peers, not teachers and counselors. Only 11 percent of the youth secured help from teachers and counselors in making job choices. Eleven percent of the NCP and 8 percent of the CP said they expected help from no one in making their job choice.

Help in getting started in a job was expected from parents and other relatives by 54 percent of the NCP and 45 percent of the CP. Forty percent of the NCP and 45 percent of the CP said they expected help from no one. None in either group said they expected help from teachers or counselors in getting started in a job.

Occupations parents want for their youth. Parental influence on youth's job choice as well as influence on youth's educational choice is related to occupational rank of the father. Thus it is not surprising that significantly higher proportions of the parents of the CP wanted their youth to enter professional, technical, and managerial occupations. Also, higher proportions of the mothers than of the fathers desired this (Table 18). Conversely, higher proportions of the parents of the NCP wanted their youth to enter lower-ranking jobs in the clerical,

Table 17. — Source of Help Expected by the Youth in Getting Started in a Job

	In making final choice				In getting started			
	Percent[a]			Chi-square	Percent[a]			Chi-square
	Total	CP	NCP		Total	CP	NCP	
Parents, relatives, and friends	63	62	66	35.04[b]	50	45	54	23.80[b]
Teachers and counselors	11	14	8		0	0	0	
Others	15	15	14		4	3	3	
No one	11	8	11		42	45	40	

[a] Nonrespondents not included. [b] Df = 3; $p < .001$.

sales, service, craftsman, foreman, and farming-allied fields. Parents of higher proportions of the CP than of the NCP youth would leave the matter of job choice to their youth. Higher proportions of the NCP than the CP said they did not know what their parents' attitudes were.

Forty-one percent of the youth and 26 percent of their fathers aspired to the highest-ranking jobs for the youth. Twenty-eight percent of the fathers desired to have their sons take jobs similar to their own. There was no difference between the CP and the NCP youth in this respect. The fathers of the CP, however, appeared to show more concern about the kind of job the youth will take, and higher percentages of the NCP youth reported that their parents had no specific concern about the youth's job choice.

Parental agreement on job choices for their youth. Fifty-six percent of the youth either said they had no evidence as to agreement or disagreement on the part of the parents or reported they did not know their parents' attitudes. More than twice as many, however, reported agreement rather than disagreement between parents. In this respect there was no difference between the CP and the NCP youth (Table 18).

Jobs youth would choose if free to choose. Percentages of the types of jobs the youth said they expected to enter and those they would

Table 18. — Desires of Parents Concerning Jobs for Their Youth

	Fathers' desires				Mothers' desires			
	Percent			Chi-square	Percent			Chi-square
	Total	CP	NCP		Total	CP	NCP	
Type of job								
Professional, technical, managerial..	26	39	17	339.10[a]	31	45	22	381.54[a]
Clerical, sales, service............	10	3	14		12	5	16	
Craftsman, foreman, farming-allied, homemaking, armed forces...........	13	7	17		11	5	17	
Operative and skilled labor..........	2	1	3		2	0	3	
Parents would leave matter to youth..	24	29	20		24	28	19	
Parents' attitude not known..........	25	21	29		20	17	23	
Relative to fathers' job								
Same as fathers'.....................	28	28	28	52.58[b]	32	31	33	30.65[b]
Different from fathers'..............	17	16	17		18	17	18	
Whatever youth wants.................	19	25	15		20	25	17	
No specific concern..................	16	15	18		13	11	13	
Parents' attitude not known..........	20	16	22		17	16	19	

	Percent			Chi-square
	Total	CP	NCP	
Parental agreement or disagreement				
Father and mother agree.............	30	30	30	25.30[c]
Father and mother disagree..........	14	13	14	
No evidence as to agreement.........	37	42	35	
Attitude not known..................	19	15	21	

[a] Df = 5; p < .001. [b] Df = 4; p < .001. [c] Df = 3; p < .001.

like to enter if they were completely free to choose their jobs appeared to be about the same. The major exception was that higher proportions of both CP and NCP youth would have liked to enter the highest ranking jobs than expected to do so (Table 19). Percentages of types of jobs youth hoped to enter and types of jobs they would like to hold at age 30 were about the same except that a higher percentage of all youth hoped for jobs in the blue-collar class at age 30. However, much higher percentages of the CP than the NCP hoped to hold jobs in the higher ranks at age 30 (Table 20).

Twenty-four percent of all youth thought that they would be unable to get the jobs they really wanted because of lack of money, grades, opportunity, available jobs, experience, or tools. There were no differences in percentages between the CP and the NCP in these respects. Higher percentages of the CP than the NCP said that lack of adequate education and training would not allow them to get the job actually desired.

The various influences on job choices discussed above differentiate the CP from the NCP in two important respects. These are ranking of job actually desired and reasons youth feel they will not be able to get this job. The decision to go or not to go to college gave those having made the decision to go greater assurance of ability to get the desired job.

Measured occupational aspirations. The job aspiration differentials between CP and NCP youth already discussed are further confirmed by data on tested measures of occupational aspiration levels devised by Haller and Miller in 1963. They define (1963, p. 9) the concept of the level of occupational aspiration (LOA) used as, ". . . a special instance of the more general concept. It differs from the general concept only in that it takes as its object the occupational hierarchy, and that the continuum of difficulty consists of the various levels

Table 19. — Types of Jobs the Youth Expected to Enter and Types of Jobs They Would Choose if They Had Complete Freedom of Choice

	Job youth expected to enter				Job chosen if free to choose			
	Percent			Chi-square	Percent			Chi-square
	Total	CP	NCP		Total	CP	NCP	
Professional, technical, and managerial jobs....	41	71	19	866.54[a]	52	79	30	762.70[b]
Lower white-collar jobs..	15	4	22		13	3	21	
Blue-collar jobs.........	26	10	39		27	10	41	
Job not known and no response...........	18	15	20		8	9	11	

[a] Df = 4; $p < .001$. [b] Df = 3; $p < .001$.

Table 20. — Job Aspirations of the Youth and Reasons the Youth Thought They Would Not Be Able to Get Job Desired

	Percent[a]			Chi-square
	Total	CP	NCP	
Job choice if completely free to choose				
Professional, technical, managerial	52	79	30	762.70[c]
Clerical, sales, service	13	3	21	
Craftsman, foreman, farming-allied, homemaking	23	9	34	
Operative and skilled labor, armed forces	4	1	7	
Not known and no response	9	9	9	
Mean North-Hatt rating of desired job[b]				
50 or fewer points	31	5	47	702.42[d]
51 to 68 points	36	42	32	
69 to 99 points	24	42	9	
Score not reported	9	9	9	
Job youth hoped to have at age 30				
Professional, technical, managerial	41	71	22	697.06[c]
Clerical, sales, service	8	3	11	
Craftsman, foreman, farming-allied, homemaking	36	17	47	
Operative and skilled labor, armed forces	3	1	5	
Not known and no response	12	8	19	
Reasons youth thought they would not be able to get job desired				
Lack of money, grades, equipment, or opportunity	24	24	24	24.98[e]
Lack of adequate education and training	18	22	14	
Parental disapproval, marriage, others	4	3	4	
Would still be in school	5	2	7	
None; youth thought they would get job desired	16	18	15	
Not known and no response	33	31	36	

[a] Some percentages do not total 100 because some youth expressed more than one preference and some gave no response.

[b] See Haller and Miller, 1963, p. 10.

[c] Df = 3; $p < .001$. [d] Df = 2; $p < .001$. [e] Df = 4; $p < .001$.

along the hierarchy." The two dimensions measured by the Haller-Miller occupational aspiration scores (OAS) are the range of aspirations from idealistic to realistic and the time range of the goals. On the basis of their tests, Haller and Miller (1963, p. 104) conclude that, ". . . the OAS appears to be a practical, reliable, and evidently a valid instrument for measuring differential levels of occupational aspiration."

There were statistically significant differences in the aspirations of the CP youth and the NCP youth in all seven tests (Table 21). These tests show that the CP had higher occupational aspirations than the NCP. Percentages were higher for both the CP and NCP in the upper half range of scores in the idealistic short-range than in the realistic long-range, showing that rural youth hope to get better jobs than they expect to get, both on the short- and long-range basis. The fact that there were significant differences between the CP and the NCP in both the high and low scores is yet another indication of a differential status of these two classes of students.

Table 21. — Occupational Aspiration Scores of the Youth

Types of tests[a]	Percent[b]			Chi-square
	Total	CP	NCP	
Realistic short range				
Upper half	19	34	8	489.08[c]
Lower half	77	62	87	
Idealistic short range				
Upper half	54	72	41	311.17[c]
Lower half	42	25	55	
Realistic long range				
Upper half	37	59	22	499.77[c]
Lower half	59	38	74	
Idealistic long range				
Upper half	68	81	59	208.24[c]
Lower half	28	16	36	
A-half: realistic				
Upper half	35	59	18	566.83[c]
Lower half	60	37	77	
B-half: idealistic				
Upper half	74	87	64	388.86[c]
Lower half	22	10	31	
Combined scores				
Upper half	44	69	26	594.26[c]
Lower half	51	27	69	

[a] See Haller and Miller, 1963, p. 66.

[b] Nonrespondents not included. [c] Df = 3; p < .001.

Table 22. — Job Experience of the Youth

	Percent[a]			Chi-square
	Total	CP	NCP	
Job experience				
None	16	17	16	1.81[b]
One job	41	40	42	
Two or more jobs	30	31	29	
Length of time for job held longest				
One year or less	41	40	40	.30[b]
More than one year	27	28	27	
Type of job held longest				
Clerical, sales	7	8	6	4.85[c]
Skilled (including farm labor)	19	18	19	
Unskilled	45	44	45	
Observation of jobs on trips taken				
Youth taking trips to observe jobs	27	30	24	12.51[d]
Youth reporting interest in professional, technical, and managerial jobs	11	19	7	
Jobs shown to be of interest				
Professional, technical, and managerial jobs	11	19	7	98.42[e]
Other jobs	13	10	16	
No response	76	71	77	

[a] Nonrespondents not included. [b] Df = 2; not significant.

[c] Df = 3; not significant. [d] Df = 1; p < .001. [e] Df = 2; p < .001.

Influence of job experience on job choice. Even though 71 percent of the youth reported they had had some job experience, most of them had held jobs for one year or less and all but 7 percent were in the blue-collar class (Table 22). Since the youth in the sample were still in high school, these were part-time and summer jobs. About one-fourth had taken trips to observe jobs in other places, but only 11 percent showed interest in professional, technical, and managerial jobs. Part-time jobs held by the students during high school years did not seem to be significantly related to jobs desired after high school.

Youth's desires for specific job training. More training for the job desired was needed, according to 90 percent of the youth (Table 23). When asked where this training could be secured, practically all of the CP youth said it was university or college; only 1 percent of the NCP reported this. The NCP, in the majority of cases, looked to business and trade schools, and 19 percent looked to other means, such as on-the-job training or farm experience.

Nature of course work desired. About three-fifths of all students would have liked to take more courses in high school. This included 67 percent of the CP and 52 percent of the NCP youth. Half of the CP

Table 23. — Training Youth Felt They Needed to Obtain Desired Job and Availability of Facilities for This Training

	Percent[a]			Chi-square
	Total	CP	NCP	
Youth did not feel they had all the training needed..	90	94	87	.29[b]
Youth felt that facilities for training were available..................................	87	92	82	
Where youth felt training could be obtained				
University or college..............................	41	99	1	2,545.98[c]
Business or trade school..........................	36	0	60	
Other...	11	0	19	
Additional courses students would have liked to have in high school				
Physical, biological, and social science courses...	12	19	7	113.89[d]
Humanities and liberal arts courses................	25	30	20	
Vocational education courses.......................	12	8	14	
Business education courses.........................	10	10	11	
No additional courses..............................	20	19	23	
Additional courses students felt high school should have offered				
Physical, biological, and social science courses...	10	16	5	300.26[d]
Humanities and liberal arts courses................	14	23	8	
Vocational agriculture and homemaking courses......	20	11	27	
No additional courses..............................	17	16	18	
Not known..	16	14	18	

[a] Nonrespondents not included.

[b] Df = 1; not significant. [c] Df = 2; p < .001. [d] Df = 4; p < .001.

and 40 percent of the NCP said they wanted courses not offered in high school. Forty-nine percent of the CP and 27 percent of the NCP wished they could have taken more of the courses that were offered in the academic field. Eighteen percent of the CP and 25 percent of the NCP felt that they should have taken more of the vocational and business education courses that were offered. Significantly higher percentages of the NCP were satisfied with the courses that were offered but significantly higher percentages of the CP said they desired more work in the sciences (Table 23).

As for courses not offered, significantly higher percentages of the NCP wanted more occupationally oriented courses and higher percentages of the CP wanted more courses in the academic field.

Preference for home location, job interest, and friends. Eighty percent of the youth said they preferred to live in the country or in a village or small town. A higher percentage of the NCP than the CP expressed preference for the country or village and a lower percentage for town (Table 24). Significantly higher percentages of the CP than the NCP said they preferred to work with people and ideas rather than with tools, machinery, plants, or animals. However, 56 percent of all youth questioned said they preferred to work with people and ideas.

The CP and the NCP differed significantly in their job concerns. The CP, in higher proportions, were more concerned with challenging

Table 24. — Youth's Preferences Regarding Place of Residence, Nature of Desired Job, and Type of Friends

	Percent[a]			Chi-square
	Total	CP	NCP	
Preferred home location				
Country or village	48	45	50	8.54[b]
Small town	32	35	30	
City	19	19	19	
Nature of interest				
Tools, machinery, plants, and animals	25	19	29	50.00[c]
People and ideas	56	64	53	
No particular preference	16	17	16	
Nature of concern				
Salary and security	42	37	46	121.19[d]
Challenging work; chance for expression	27	48	27	
Relations with co-workers	9	6	10	
Prestige	1	1	1	
Preferred type of friends				
Old friends	33	30	36	7.66[e]
New friends	60	63	56	
Preference as to for whom to work				
For others	59	57	61	10.21[e]
For self	37	40	35	

[a] Nonrespondents not included. [b] Df = 2; p < .02.
[c] Df = 1; p < .001. [d] Df = 4; p < .001. [e] Df = 1; p < .01.

work and a chance for self-expression, while the NCP were concerned with salary, job security, and relations with co-workers. Higher proportions of the NCP were concerned with having friendly co-workers, a fair boss, and the chance for advancement. Higher proportions of the NCP preferred old friends and to work for others, while higher proportions of the CP preferred to have new friends and to be self-employed. Even so, 60 percent of all youth questioned preferred to have new friends and 59 percent said they preferred to work for others.

ACADEMIC COMPETENCE, MECHANICAL APTITUDE, AND PERSONALITY

This section deals with academic competence as shown by records for the University of Illinois High School Testing Service, and mechanical aptitude and personality characteristics of the youth under study. Data analyzed give some evidence that not only are environmental influences operating on the youth to differentiate them into the CP and the NCP and the educational and job choices they make, but also that the aptitudes, skills, and sociopersonal traits of the CP and the NCP are differentiating factors.

Academic competence and mechanical reasoning. Higher proportions of the CP than the NCP made high scores on all the academic tests (Table 25). For example, scores for more than half of the CP fell in the upper-half range of all scores in abstract reasoning while the scores of over two-thirds of the NCP fell in the lower half. Differences were even greater in verbal reasoning and natural science reading. For all other scores the majority of both the CP and the NCP ranked in the upper half but higher percentages of the CP than the NCP did so. On the mechanical reasoning test, 69 percent of the CP ranked in the upper half of all scores while only 48 percent of the NCP did so (Table 26).

Personality characteristics. Sixteen personality traits were measured by the personality and ability test. The raw scores from the tests were transformed into sten (standard ten) scores, distributed over ten equal standard score points, and the following distribution was obtained showing normal percentages for below-average, average, and above-average groups.[1]

Sten score	1	2	3	4	5	6	7	8	9	10
Distribution (%)	2.3	4.4	9.2	15.0	19.1	19.1	15.0	9.2	4.4	2.3
	30.9				38.2		30.9			

---

[1] Manual for Forms A and B, 16 PF for Young Adults and Adult Personality and Ability Testing. Institute of Personality and Ability Testing, Champaign, Illinois.

An analysis of the Chi-square differences in scores for the CP and the NCP and of the percentages of each group falling in the below normal, normal, and above normal categories reveals that the CP, in higher proportions than the NCP, had the more favorable personality traits, except with respect to factors L, N, Q1, and Q3 (Table 27). (Titles of factors given in Table 27.)

The CP had significantly higher percentages in the above-normal range in being outgoing, more intelligent, emotionally stable, assertive,

Table 25. — Academic Capability Scores of the Youth

	Percent[a]			Chi-square
	Total	CP	NCP	
Abstract reasoning				
Lower half	57	42	67	230.10[c]
Upper half	37	53	26	
Verbal reasoning				
Lower half	46	26	58	419.98[d]
Upper half	48	69	35	
Total of abstract and verbal reasoning				
Lower half	24	10	33	430.90[d]
Upper half	70	85	60	
Natural science reading				
Lower half	34	17	47	468.99[d]
Upper half	60	78	47	
Social science reading				
Lower half	20	8	28	319.81[c]
Upper half	74	87	65	
Writing				
Lower half	13	4	19	299.57[c]
Upper half	81	91	75	
Conventional errors in writing[b]				
Lower half	89	93	86	187.58[c]
Upper half	5	2	7	
Functional errors in writing[b]				
Lower half	83	91	78	234.04[c]
Upper half	10	3	15	

[a] Nonrespondents not included. [b] Lowest scores mean fewest errors.
[c] Df = 2; $p < .001$. [d] Df = 3; $p < .001$.

Table 26. — Mechanical Aptitude Scores of the Youth

	Percent[a]			Chi-square
	Total	CP	NCP	
Mechanical aptitude scores				
1 to 17 points	10	4	10	444.93[b]
18 to 34 points	33	26	40	
35 to 51 points	42	49	39	
52 to 67 points	13	20	9	

[a] Nonrespondents not included. [b] Df = 3; $p < .001$.

Table 27. — Personality Characteristics of the Youth

	Below normal		Normal		Above normal		Chi-square
	Norm = 30.9%		Norm = 38.2%		Norm = 30.9%		
Personality factors[a]	CP	NCP	CP	NCP	CP	NCP	
	Percent		Percent		Percent		
A. Reserved/outgoing	27	26	41	47	32	27	13.86[b]
B. Less intelligent/ more intelligent	7	11	28	38	65	51	53.52[b]
C. Affected by feelings/ emotionally stable	38	47	40	36	22	17	24.25[b]
E. Humble/assertive	34	33	38	43	28	24	7.50[c]
F. Sober/happy-go-lucky	32	39	35	34	33	27	16.79[b]
G. Expedient/conscientious	32	40	38	36	30	24	23.46[b]
H. Shy/venturesome	33	39	42	40	25	21	12.85[d]
I. Tough-minded/tender-minded	30	34	36	42	34	24	27.08[b]
L. Trusting/suspicious	26	23	37	38	35	39	5.33[e]
M. Practical/imaginative	34	34	43	48	23	18	11.23[d]
N. Forthright/shrewd	32	31	42	42	26	27	.17[e]
O. Placid/apprehensive	26	14	34	35	40	51	70.82[b]
Q1. Conservative/experimenting	34	32	39	43	27	25	4.68[e]
Q2. Group-dependent/ self-sufficient	39	32	35	39	26	29	13.86[b]
Q3. Undisciplined/controlled	36	33	36	36	28	29	2.73[e]
Q4. Relaxed/tense	25	20	39	42	36	38	9.00[f]

[a] See Institute for Personality and Ability Testing, 1964, for full description of the factors. The description to the left of the slash refers to the below-average sten score and the description to the right of the slash refers to the above-average sten score.

[b] Df = 2; p < .001. [c] Df = 2; p < .05. [d] Df = 2; p < .01.

[e] Df = 2; not significant. [f] Df = 2; p < .02.

happy-go-lucky, conscientious, venturesome, tender-minded, imaginative, and placid. The NCP had significantly higher percentages in the above-normal range in being apprehensive, self-sufficient, and tense. The CP had significantly lower percentages in the below-normal range in being affected by feelings, sober, expedient, shy, and tough-minded; they had higher percentages in being humble, trusting, forthright, placid, conservative, group-dependent, and relaxed.

INTERRELATIONSHIPS AMONG FACTORS INFLUENCING COLLEGE PRONENESS

The data presented in this bulletin, showing the differences in aptitudes, skills, and sociopersonal attitudes between the CP and the NCP youth, suggest that the NCP have greater propensities for entering skilled, artisan, and especially service occupations rather than for entering college after graduation from high school. The various factors that characterize CP and NCP youth can be regarded as interrelated. This can be tested by correlational analyses which give an indication as to the extent to which the various factors are associated.

Interrelations between home and family factors. Significant positive associations were found between age and class in school, number in family away from home, and number of brothers and sisters (Table 28).

Of importance are the negative associations shown between family size and occupational prestige of father, parental educational score, socioeconomic status score, combined social status score, and parental support for further education for the youth. These five factors are also associated with age. These associations imply that the larger families were lower in socioeconomic status and gave less support to youth in furthering their education than was the case with smaller families.

The family social and economic status factors, on the other hand, were all positively interrelated with each other and with parental support for the youths' education beyond high school. Factor analysis shows parental educational attainment, mother's educational score, and combined educational score highly correlated in one cluster and father's satisfaction with his education and mother's satisfaction with her education highly correlated in a second cluster. The highest coefficients (0.86 and 0.82) were between the combined parental education score and the fathers' and the mothers' educational attainment scores. The coefficient between combined parental education score and the combined educational satisfaction score was 0.48. The combined parental education score could be used both as an index of school grade attainment by the parents and of their satisfaction with their schooling.

Table 28. — Pearsonian Coefficients of Correlation Relative to Home and Family Indexes[a]

Variables	Variables 1	2	3	4	5	6	7	8	9	10
1. Age	...									
2. Class in school	52	...								
3. Number in family at home	NS	NS	...							
4. Number in family away	16	NS	- 9	...						
5. Number of brothers and sisters	7	NS	64	47	...					
6. Occupational prestige rating of father	NS	6	NS	-12	- 9	...				
7. Combined parental education score[b]	-13	NS	- 1	-33	- 8	28	...			
8. Socioeconomic status score	-11	NS	-21	-31	-33	35	39	...		
9. Combined social status score[c]	- 5	7	-11	-19	-17	95	37	63	...	
10. Parental support for youth's education	- 8	NS	-12	-17	-20	15	12	32	24	...

[a] Critical value = .045, two-tailed test, .01 level. Coefficients multiplied by 100. NS = not significant.

[b] Point values for this score were assigned as follows: 8 grades and less = 2 points; 9-12 grades = 7 points; more than 12 grades = 8 points.

[c] See Haller and Miller, 1963.

Interrelations between family and social participation factors. The associations shown in Table 29 are all positive for all variables except for the number of brothers and sisters, and these are negative with five of the social participation factors. This is an indication that youth from the larger families do not take part as much in such activities as do youth from smaller families. Table 28 shows negative associations with educational, socioeconomic status, and support for youth's further education indexes.

The associations were positive and high between indexes for occupational prestige of father, combined parental education, socioeconomic status, parental support for further education of the youth, and all school and community social participation indexes. The exceptions were the low coefficients associating parental education and participation in school activities, curricular activity rating, and number of admired adults, and the association between parental support for youth's education, the number of admired adults, and the coefficient of correlation between occupational prestige of father and number of admired adults. All were significant at the 0.01 level. The factor analysis showed high coefficients between three clusters. These were (1) index of school participation, index of church and community participation, and index of leadership activity; (2) index of extracurricular activity and self-rating activity prestige index; and (3) prestige occupational rating of admired adults and kin-relationship of adults to youth. The highest zero-order correlation coefficient was between combined school and community participation index and school participation index.

Table 29. — Pearsonian Coefficients of Correlation Between Home and Family and School and Community Influences[a]

Variables	Variables							
	6	7	8	9	10	11	12	13
1. Number of brothers and sisters...........	-11	-12	- 9	- 8	- 9	NS	- 5	
2. Occupational prestige rating of father...	17	20	18	18	19	6	24	
3. Combined parental education score........	6	11	9	8	15	7	10	
4. Socioeconomic status score...............	21	31	26	25	25	9	26	
5. Parental support for youth's education...	17	20	19	19	23	7	17	
6. School social participation score........	...							
7. Combined school and community participation score.....................	71	...						
8. Extracurricular activity score...........	50	47	...					
9. Curricular activity score................	51	48	95	...				
10. Leadership self-rating score............	37	35	40	41	...			
11. Number of admired adults................	18	22	20	20	12	...		
12. Occupational prestige rating of admired adults.......................	17	24	25	25	19	14	...	
13. Teachers earned students' sincere respect	5	19	17	17	15	15	4	...
14. Teachers made students feel wanted.......	9	10	9	9	7	11	13	54

[a] Critical value = .045, two-tailed test, .01 level. Coefficients multiplied by 100. NS = not significant.

The fact that all social participation indexes are significantly interrelated implies that youth taking active part in one activity are likely to be active in others and that these youth tend, in general, to come from the more affluent, better-educated families and those giving the most support to the post-high school education of the youth.

The influence of teachers in class is also an important factor. All indexes of the nature of the helpfulness of teachers were found to be interrelated with coefficients of 0.39 or above and as high as 0.54 (Table 14). Correlations with other variables were all positive and significant (Table 29). The coefficients of teacher influence were highest with school and community and extracurricular activity participation, and leadership and prestige ratings, indicating those students whose families rated high in indexes of social and economic status also rated high in teachers' esteem.

Interrelations of educational and occupational aspirations, academic competence, and mechanical aptitude with other factors. Factors that were highly associated with factors in the family and social participation area were also highly correlated with educational needs and job aspirations of youth (Tables 28 and 29). The exceptions were no correlations of (1) the index of the jobs the youth want with parental education score, (2) the church and community participation index and mechanical aptitude, and (3) jobs youth want and index of teachers' influence (Table 30).

The correlation coefficients between education needed, job aspiration scores, and scores for abstract and verbal reasoning and mechanical aptitude were all relatively high. These two tests were intercorrelated with all other academic competence tests. The lowest academic average score was — 0.48 for verbal reasoning with conventional errors in writing and the highest was 0.90 between verbal reasoning and the total score for abstract and verbal reasoning. Correlation coefficients between academic scores and mechanical aptitude scores were lower, the lowest being — 0.22 with conventional errors in writing, and the highest 0.51 with the total of abstract and verbal reasoning. All of the scores were well above the critical ratio of 0.045. These interrelations imply that family, social participation, educational needs and job aspiration, academic competence, and mechanical aptitude factors, with exceptions noted, are all associated.

Intercorrelations of personality trait factors with most highly correlated factors in other areas. Table 31 shows the areas in which there were significant intercorrelations among the 16 personality factors and among the nine other factors. The nine factors, in general, have

Table 30. — Pearsonian Coefficients of Correlation Between Occupational Aspiration, Academic Competence, and Vocational Aptitude[a]

Variables	Variables 9	10	11	12	13	14	15
1. Number of brothers and sisters.........	10	- 8	-10	-14	-15	-15	-10
2. Combined parental education score......	22	NS	5	9	9	12	6
3. Parental support for youth's education.	39	23	27	38	41	26	14
4. Socioeconomic status score............	25	21	24	35	37	35	20
5. Occupational prestige rating of father.	15	13	13	21	21	23	14
6. Church and community participation score..................................	24	19	20	26	29	31	NS
7. Extracurricular activity score.........	21	13	22	27	28	28	6
8. Teachers earned students' sincere respect.......................	10	NS	8	6	6	4	10
9. Type of training needed...............	...						
10. Occupational prestige rating of job wanted by youth......................	21	...					
11. Occupational prestige rating of job youth would choose if free to choose...	40	34	...				
12. A-half (realistic) occupational aspiration score......................	37	32	46	...			
13. Combined occupational aspiration score.	40	58	67	89	...		
14. Combined verbal and abstract reasoning score........................	30	23	29	40	43	...	
15. Mechanical aptitude score.............	8	2	12	20	18	51	...

[a]Critical value = .045, two-tailed test, .01 level. Coefficients multiplied by 100. NS = not significant.

been shown to be highly intercorrelated. But this is not the case with intercorrelations between the 16 personality traits and the other nine factors. The following factors were shown to be associated positively or negatively as indicated with the poles of the 16 personality traits.

1. Combined parental education score positively with emotionally stable, happy-go-lucky, and shrewd, and negatively with trusting and placid.

2. Parental desire for youth's further education positively with more intelligent, emotionally stable, happy-go-lucky, conscientious, venturesome, and shrewd, and negatively with placid and group-dependent.

3. Family socioeconomic index positively with more intelligent, emotionally stable, happy-go-lucky, conscientious, and venturesome, and negatively with placid and group-dependent.

4. Prestige rating of father's occupation positively with more intelligent, emotionally stable, and venturesome, and negatively with placid and group-dependent.

5. Prestige rating of occupation of admired adults positively with more intelligent, emotionally stable, happy-go-lucky, conscientious, venturesome, and experimenting, and negatively with placid and group-dependent.

Table 31. — Pearsonian Coefficients of Correlation Between Family and Personal Variables of the Youth and Personality Factors of the Youth[a]

Variables and personality factors	Personality factors															
	A	B	C	E	F	G	H	I	L	M	N	O	Q1	Q2	Q3	Q4
Variables																
Combined parental education score	NS	NS	7	NS	5	NS	NS	NS	- 5	NS	6	-10	NS	NS	NS	NS
Parental support for youth's education	NS	12	13	NS	14	12	11	NS	NS	NS	5	-14	NS	- 7	NS	NS
Socioeconomic status score	NS	12	10	NS	11	5	11	NS	NS	NS	NS	-16	NS	- 8	NS	NS
Occupational prestige rating of father	NS	5	6	NS	NS	NS	7	NS	NS	NS	NS	-11	NS	- 6	NS	NS
Occupational prestige rating of admired adults	NS	13	8	NS	5	5	5	NS	NS	NS	NS	- 9	5	- 5	NS	NS
Extracurricular activity score	9	16	12	14	19	12	24	12	NS	NS	6	-10	10	-15	NS	NS
Combined occupational aspiration score	NS	22	12	7	14	14	15	5	NS	NS	9	-16	9	- 6	NS	NS
Combined verbal and abstract reasoning score	-12	37	6	NS	9	NS	NS	NS	NS	NS	NS	-16	13	NS	-15	NS
Mechanical aptitude score	-21	24	8	NS	NS	NS	- 6	-13	NS	NS	- 5	-10	6	11	NS	NS
Personality factors[b]																
A. Reserved/outgoing	...															
B. Less intelligent/more intelligent	11	...														
C. Affected by feelings/emotionally stable	11	17	...													
E. Humble/assertive	27	19	13	...												
F. Sober/happy-go-lucky	39	22	22	47	...											
G. Expedient/conscientious	18	19	42	NS	14	...										
H. Shy/venturesome	38	13	38	42	54	29	...									
I. Tough-minded/tender-minded	31	16	9	16	14	16	17	...								
L. Trusting/suspicious	14	12	-12	32	22	- 6	7	14	...							
M. Practical/imaginative	16	13	6	21	7	8	9	31	24	...						
N. Forthright/shrewd	16	14	31	11	11	37	23	17	5	13	...					
O. Placid/apprehensive	15	NS	-28	15	8	- 7	-10	20	40	23	- 6	...				
Q1. Conservative/experimenting	11	21	19	26	17	15	19	17	16	26	19	8	...			
Q2. Group-dependent/self-sufficient	-11	17	11	6	-20	NS	-17	15	13	26	11	10	23	...		
Q3. Undisciplined/controlled	11	8	43	- 5	NS	51	22	13	-12	10	34	-13	16	9	...	
Q4. Relaxed/tense	16	13	-26	30	20	-10	NS	19	45	27	- 5	54	10	12	-21	...

---

[a] Critical value = .045, two-tailed test, .01 level. Coefficients multiplied by 100. NS = not significant.

[b] See Institute for Personality and Ability Testing, 1964, for full description of the factors. The description to the left of the slash refers to the below-average sten score and the description to the right of the slash refers to the above-average sten score.

6. Index of extracurricular activity positively with outgoing, more intelligent, emotionally stable, assertive, happy-go-lucky, conscientious, venturesome, tender-minded, shrewd, and experimenting, and negatively with placid and group-dependent.

7. Combined score for occupational aspiration positively with more intelligent, emotionally stable, assertive, happy-go-lucky, conscientious, venturesome, tender-minded, shrewd, and experimenting, and negatively with placid and group-dependent.

8. Total verbal and abstract reasoning score positively with more intelligent, emotionally stable, happy-go-lucky, and experimenting, and negatively with reserved, placid, and undisciplined.

9. Mechanical aptitude score positively with more intelligent, emotionally stable, experimenting, and self-sufficient, and negatively with reserved, shy, tough-minded, forthright, and placid.

These associations, taken together, indicate that "plus" personality factors were generally associated with indexes of relatively high socioeconomic status and prestige, with most of the high participational indexes, and with high occupational aspirations. The associations of social participation factors with these "plus" personality factors are especially to be noted as are those with occupational aspiration. The differences between the traits associated with academic competence did not agree with four of the traits associated with mechanical aptitude, these being shy, tough-minded, forthright, and group-dependent.

The "minus" factors that were negatively associated with the nine variables include being affected by feelings, sober, apprehensive, shy, and having a tendency to making one's own decisions. These personality traits were more closely associated with the family and social situations characterizing the NCP than the CP youth.

These intercorrelations are most meaningful in terms of the type of education and training needed by the youth not planning on college. It is obvious that training is needed by the NCP in vocational and technical areas as well as in the academic subjects, especially in reading and social science. The differences in personality traits are most obvious in the way in which certain traits are associated, not only with academic and mechanical skills but with the cultural and social factors that affect the youth as well.

INTERPRETATIONS AND IMPLICATIONS

It is evident from the findings of the study that there is no ready answer as to what specific training is needed to best fit the NCP to take technical or artisan jobs that are likely to be available in our rapidly changing technological society. The below-professional technical and artisan occupations will probably require three times as many workers as will be needed in the professional and managerial occupations (Table 1). These jobs will have to be filled largely by those who do not go to college.

It is of basic importance that the majority of rural youth do not plan to go to college. Since 25 percent of rural youth leave high school before graduation, at least three-fourths of the rural youth entering high school are not likely to attend a college or university. For these youth educational opportunities in the average rural high school were inadequate at the time of this study. However, plans to more adequately provide for the high school and post-high school educational needs of these youth are now being implemented. In implementing these plans, it must be remembered that only 5 percent of the youth included in this study plan to farm.

Data from this study make it clear that there are significant differences between the CP and NCP rural youth due to home, school, and community influences. The aptitudes, skills, and sociopersonal qualities possessed by the NCP rural youth are different from those required by professional or managerial types of jobs. Most rural youth, including those not intending to go to college, attend high schools largely oriented for college preparation. Thus it is not surprising that NCP rural youth do not have the training needed to get jobs suited to their abilities and aspirations when they graduate from high school.

The conception the NCP rural youth have of the type of training needed for jobs they will take after finishing high school is not very clear. Some felt they needed more occupational training, but they had little knowledge of the exact type of training needed. Also, the youth generally had little knowledge of where to get occupational training. The schools and the youth's families and peer groups were found to be of little help because they knew little more about what training was needed than did the youth themselves. This lack of clarity about the occupational training needs of NCP rural youth suggests that high school counseling was inadequate for these youth in preparing them for making choices about occupational training and jobs.

Results from academic competence and mechanical aptitude tests showed that most NCP rural youth needed more training in mechanical skills. Such training can be provided in the high school. However, evidently little was done by the high schools to find out who were the youth needing such training, and little was made available even if such specialized needs were made evident. This is because of the tendency of these schools to provide a college-oriented program for all students, thus partly neglecting the educational needs of the NCP youth.

The differentials shown in tests revealing personality traits indicating social maladjustment of a third or more of the students also indicate the need for professionally trained counselors available to all students in the high school. In this way it might be possible to identify the aspirations and capabilities of the youth early in their high school careers and to direct them into courses that will prepare them for jobs to which they aspire and in which they are most likely to be successful. In most high schools this would also require more vocational courses for the NCP. Some of the problem will also be alleviated by junior colleges which can provide more advanced and more specialized programs for students who have taken the elementary courses in high school. Attention must also be given to personality development, both at the high school and post-high school levels, to help correct the traits of social maladjustment evident in many of the youth.

The implications of the study relate to almost all aspects of the rural school system. Many of them are supported by the recommendations of other studies previously mentioned as well as by the findings of the Task Force on the Future of Education in Illinois. A few of the implications of this study are given below.

1. The education of the NCP, who make up the majority of those graduating from high school, is a more difficult task than the education of the CP. A high proportion of the NCP desire some kind of training or education beyond high school. Illinois is in the process of providing more adequately for the education of these youth. In the plans for the development of junior colleges, it is anticipated that 80 percent of the youth graduating from high school will enter either junior or four-year colleges.

The type of high school program to be provided for the NCP is of great importance. The data presented in this study suggest that the program must be a combination of occupational or vocational training and academic education together with an effective program of counseling and guidance to prepare the youth for either further education or entrance into the labor force.

2. The limitations of the small rural school system in providing for the kind of broad educational programs implied as needed by this study place emphasis upon the imperative for further consolidation of these systems. This means that rural school systems must accommodate themselves to the basic changes taking place in rural society. The trend should be toward larger units of administration, stressing unit or 12-

grade systems, and programs adaptable to changing conditions in a rapidly changing society, with emphasis on the changing nature of rural society. Also, the maintenance of small schools means not only a limitation of course offerings but also a limitation of the ability of the rural people to finance school programs.

3. The rural school systems need to be more closely integrated into the total state system than has been the case in the past. The rural high school should prepare most of its youth to live and work in urban areas because technological development in agriculture has made it impossible for many rural youth to enter farming.

4. Changing value systems must be recognized. The value systems of any society grow out of the total culture of that society. It has been shown in this study that the personality traits of CP and NCP youth are different. The traditional rural value system has stressed the value of succeeding the older generation in the occupation of farming. It is apparent that this situation has now changed. The CP rural youth aspire to higher occupational levels. Most of the NCP rural youth must also expect to have to work in an urban environment. Concern for the formation of value systems in a changing society must therefore extend to the rural school system; this is part of the task of conditioning rural youth to live in an urban society.

Decision-making on the part of the youth is of basic importance and it is influenced by values and value systems. The concept that youth make their own decisions, or they should do so, with regard to going to college is denied by this study. Of most importance are the various influences operating, especially on the NCP youth. These are not, in the main, professional influences. They are, rather, the peer and reference groups, particularly the family and kinship groups. It is not surprising that these influences tend to enforce conformity with the norms of these groups, which are, more or less, tradition bound. If the aspirations and values of the youth are to be reoriented toward the values of the larger society into which the majority of the youth will enter, professional guidance and counseling in the high school and post-high school period as well as vocational and academic programs oriented toward the aspirations and abilities of the youth are essential.

BIBLIOGRAPHY

Aiton, E. W. 1963. Myth and myopia — blocks to progress. Ext. Ser. Rev. 34: 141-142.

Bealer, R. C., Willits, F. K., and Maida, P. R. 1965. The myth of a rebellious adolescent subculture: Its detrimental effects for understanding rural youth. Pp. 45-61 *in* Rural youth in crisis. Ed. by L. G. Burchinal. U.S. Department of Health, Education, and Welfare. Washington, D.C.

BLALOCK, H. M. 1960. Social statistics. McGraw-Hill. New York.

BOGUE, D. J., and BEALE, C. L. 1964. Recent population trends in the United States and their causes. Pp. 71-126 *in* Our changing rural society. Ed. by J. H. Copp. Iowa State University Press. Ames, Iowa.

BURCHINAL, L. G., HALLER, A. O., and TAVES, M. T. 1962. Career choices of rural youth in a changing society. Minn. Agr. Exp. Sta. Bull. 458.

BUTTERWORTH, J. E., and DAWSON, H. A. 1952. The modern rural school. McGraw-Hill. New York, N.Y.

CATTELL, R. B., and EBER, H. W. 1957, 1964. Handbook for the sixteen personality factor questionnaire, "The 16 P.F. test." Forms A, B, and C. Institute of Personality and Ability Testing. Champaign, Ill.

COWHIG, J. D. 1962. Early occupational status as related to education and residence. Rural Soc. 27:18-27.

FLIEGEL, F. C. 1959. Aspirations of low income farmers and their performance and potential for change. Rural Soc. 24:205-214.

HAGOOD, MARGARET J., and PRICE, D. O. 1952. Statistics for sociologists. (Revised ed.) Holt. New York, N.Y.

HALLER, A. O., and MILLER, I. W. 1963. The occupational aspiration scale: Theory, structure and correlates. Mich. Agr. Exp. Sta. Tech. Bull. 288.

HEILBRONER, R. L. 1965. Understanding macro-economics. Prentice-Hall. Englewood Cliffs, N.J.

HEMP, PAUL, PHIPPS, L. J., WAMBROD, ROBERT, EHRESMAN, NORMAN, and MCMILLION, MARTIN. 1966. Illinois agricultural education curriculum research project. Final report. University of Illinois, College of Education, Department of Vocational and Technical Education, Agricultural Education Division. Urbana, Ill.

HOLDEN, D. E. W. 1965. Associations as reference groups: An approach to the problem. Rural Soc. 30:63-74.

ILLINOIS BOARD OF HIGHER EDUCATION. 1966. Phase II: Report of the Board of Higher Education. State of Illinois. Springfield, Ill.

ILLINOIS BOARD OF VOCATIONAL EDUCATION. 1963. Agricultural education, annual directory. Series B, Bull. 192a. Office of the Superintendent of Public Instruction, State of Illinois. Springfield, Ill.

INSTITUTE OF PERSONALITY AND ABILITY TESTING. 1963. Summary of 16 PF data in the clinical area. IPAT Inf. Bull. 8. Institute of Personality and Ability Testing. Champaign, Ill.

———— 1964. Manual for Forms A and B, 16 PF for young adults and adult personality and ability testing. Institute for Personality and Ability Testing. Champaign, Ill.

KLIETSCH, R. G., ANDREWS, W. H., BAUDER, W. W., BEEGLE, J. A., DOERFLINGER, J. A., MARSHALL, D. G., TAVES, M. J., and RILEY, M. P. 1964. Social response to population change and migration. Iowa Agr. Exp. Sta. Spec. Rpt. 40.

KUVLESKY, W. P. 1966. Occupational aspirations and subsequent attainment: A longitudinal study of young adults. Texas Agr. Exp. Sta. mimeo.

KUVLESKY, W. P., and BEALER, R. C. 1966. A clarification of the concept "occupational choice." Rural Soc. 31:266-267.

KUVLESKY, W. P., and OHLENDORF, G. W. 1965. A bibliography of literature on occupational aspirations and expectations. Texas Agr. Exp. Sta. Dept. Agr. Econ. and Soc. Inf. Rpt. 65-3.

LARSON, O. F., and ROGERS, E. M. 1964. Rural society in transition: The American setting. Pp. 39-67 *in* Our changing rural society. Ed. by J. H. Copp. Iowa State University Press. Ames, Iowa.

Lindstrom, D. E. 1958. Development of rural community schools in Illinois. Ill. Agr. Exp. Sta. Bull. 627.

——— 1964a. Differences in academic capability between youth planning and not planning on college. Univ. Ill. Dept. Agr. Econ. RSM-40.

——— 1964b. Vocational needs of rural youth: A pilot study. Ill. Agr. Econ. 4(2):11-17.

——— 1965a. Educational needs of rural youth. Jour. Coop. Ext. 3(1):33-41.

——— 1965b. Some differences between high school students planning on college and those without college plans. Ill. Res. 7(1):12-13.

——— 1967. Factors related to the education and job plans of rural youth. Ill. Agr. Econ. 7(1):31-36.

Loomis, C. P., and Beegle, J. A. 1957. Rural sociology: The strategy of change. Prentice-Hall. Englewood Cliffs, N.J.

Mangus, A. R. 1949. Mental health of rural children of Ohio. Ohio Agr. Exp. Sta. Res. Bull. 682.

McLure, W. P. 1960. Vocational and technical education in Illinois. University of Illinois Bureau of Educational Research. Champaign, Ill.

Moore, E. J., Baum, E. L., and Glasgow, R. B. 1964. Economic factors influencing educational attainments and aspirations of farm youth. U.S. Department of Agriculture Economic Research Service. Agr. Econ. Rpt. 51.

National Council of Churches. 1966. Yearbook for American churches. National Council of Churches, Department of Research, Information Service. New York, N.Y.

National Opinion Research Center. 1947. Jobs and occupations. Opinion News 9:3-13.

Patterson, C. H. 1962. Counseling and guidance in schools. Harper and Row. New York, N.Y.

Phipps, L. J. 1965. Handbook on agricultural education in public schools. Interstate Printers and Publishers, Inc. Danville, Ill.

Ross, R. C., and Case, H. C. M. 1956. Types of farming in Illinois. Ill. Agr. Exp. Sta. Bull. 601.

Schwarzweller, H. K. 1959. Value orientations in educational and occupational choices. Rural Soc. 24:246-256.

——— 1960. Sociocultural factors and the career aspirations and plans of rural Kentucky high school seniors. Ky. Agr. Exp. Sta. Dept. Rural Soc. Progress Rpt. 94.

Sewell, W. H. 1943. A short form of the farm family socioeconomic status scale. Rural Soc. 8:161-170.

Sewell, W. H., and Haller, A. O. 1965. The educational and occupational perspectives of rural youth. Pp. 149-169 *in* Rural youth in crisis. Ed. by L. G. Burchinal. U.S. Department of Health, Education, and Welfare. Washington, D.C. Reprinted from a University of Wisconsin mimeograph prepared for the National Committee for Children and Youth.

Task Force on Education in Illinois. 1966. Education for the future of Illinois. Task Force on Education in Illinois. State of Illinois. Springfield, Ill.

Taves, M. J., and Coller, R. W. 1963. In search of opportunity. Minn. Agr. Exp. Sta. Tech. Bull. 247.

U.S. Department of Agriculture. 1966. Rural people in the American economy. U.S. Department of Agriculture Economic Research Service. Agr. Econ. Rpt. 101.

U.S. Department of Commerce. 1967. 1964 United States census of agriculture. Vol. I, Part 12. U.S. Department of Commerce, Bureau of Census. Washington, D.C.

5M—6-68—96749

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

UNIVERSITY OF ILLINOIS-URBANA
Q.630.7IL6B C008
BULLETIN. URBANA
731 1968
3 0112 019530846